

Appl. No. 09/838,070
Amtd. Dated November 21, 2003
Reply to Office Action of September 25, 2003

Amendments to the Specification

Please amend paragraph [0018] to read as follows:

[0018] The preferred operating conditions for using the present catalysts include temperatures of about 900°C to about 1300°C, and more preferably from about 1000°C to about 1200°C, and pressures of about 110 kPa to about 3000 kPa, and more preferably from about 500 kPa to about 3000 kPa. The feed stream comprising a hydrocarbon feedstock and oxygen gas is preferably preheated to from about 50°C to about 700°C, and more preferably to about 400°C, before contacting the catalyst. In some embodiments the feed stream is preheated to at least about 350°C, and more preferably to about 400°C. Typical space velocities for the process are from about 60,000 hr⁻¹ to about 20,000,000 hr⁻¹, and are preferably from about 150,000 hr⁻¹ to about 10,000,000 hr⁻¹.

After paragraph [0018], please insert the following new paragraph as [0018.1]:

[0018.1] Additionally, a process for the catalytic partial oxidation of a hydrocarbon feedstock is provided comprising: (a) preheating a feed stream comprising a hydrocarbon feedstock and oxygen gas to at least about 350°C; (b) passing the feed stream over an unsupported rhodium foam catalyst at a space velocity from about 150,000 to about 10,000,000 NL/kg/h at conversion-promoting conditions comprising a pressure from about 500 kPa to about 2800 kPa wherein the conditions are effective to produce an effluent stream comprising carbon monoxide and hydrogen; wherein the carbon selectivity for carbon monoxide is at least about 80% and the hydrogen selectivity is at least about 60%.